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An Investigation of the Adequacy of the Student Teaching Program for Industrial Arts Students at Central Washington College of Education

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AN INVESTIGATION OF THE ADEQUACY OF THE STUDENT TEACHING PROGRAM FOR INDUSTRIAL ARTS STUDENTS AT CENTRAL WASHINGTON COLLEGE OF EDUCATION

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CHAPTER I

INTRODUCTION TO THE PROBLEM

The student teaching program has been developed to provide the prospective teacher with an understanding of the responsibilities of the first year as a teacher. College instruction can provide the prospective teacher with many theories and facts about the education of children. It can build skills in many specialized fields and helps to develop the social individual. Practical experience, however, can be obtained only on the job.

It has been said that children are the most precious possession of man. Parents are reluctant to turn the supervision or training of their children over to personnel with little understanding of or apprentice experience in education. Internship in the form of student teaching offers the prospective teacher the opportunity to try himself at teaching in a classroom, at counseling students on individual and group problems, and at the administration of a classroom program. These first experiences under the guidance of the experienced teacher also will help to indicate the capabilities and the personal feelings of the prospective teacher.

Student teaching in the United States has been patterned after the training systems of Europe.

> From the very early times, mankind has recognized a period of preliminary, guided training before the novice became a member of the adult group. There were primitive initiations for boys and girls at puberty; the medieval pages and esquires; the apprentice in the guild system. When, where, and how this idea became a practice among teachers is not known. It is seemingly a rather recent application of the idea. . . (29:5).

Student teaching was adopted in this country as early as 1800 in imitation of European systems. Normal schools with attached model or experimental schools were an early development in this country. Between 1800 and the present time, student teaching in this country progressed from a rather primitive apprentice system to the place where the actual student teaching is only a part of teacher preparation. Sam P. Wiggins in his recent book, The Student Teacher in Action, presented the following in support of the program (36:4):

> Student teaching offers you the opportunity to find out how well you can learn to teach, rather than to prove in desperation that you are already a good teacher. The experience is not simply one of practice. Rather it is learning to teach under supervision.

Industrial arts teaching requires a combination of laboratory and classroom teaching ability. The individual teacher may find himself teaching in any of the major areas of Industrial Arts, in woodworking, drawing, metalworking, or crafts. In addition to the normal teaching and supervision of the classroom, he will be faced with problems in the maintenance of tools, equipment, and room facilities,

in the planning for, ordering, storing, disbursing and financing of supplies, and in the inventory of all materials and equipment used in the industrial arts program. In every school district, the course of study followed and the solution of routine administrative matters are organized to meet the needs of that particular community. Because of the multitude of important subject areas which must be covered by the college curriculum, it is nearly impossible to have adequate experience and training in every subject matter of importance. Student teaching provides an opportunity for the prospective teacher to experiment with those problems of teaching and administration for which he has been trained and with those problems which must be accounted for by experience in the field.

I. STATEMENT OF THE PROBLEM

A prospective teacher is interested in a training program which will enable him to step into his first teaching station with a feeling of security about the many duties he may be expected to perform. School administrators examine teacher candidates in the light of their proficiency in college studies and their philosophy of education. The experiences received are only as adequate as the training program has made them.

The student teaching program at Central is intended

to provide an adequate experience in classroom teaching. What, then, is the status of the laboratory teaching situation, which involves many problems not presented in the classroom? This thesis was directed at determining the adequacy of the student teaching program at Central Washington College of Education.

Are industrial arts student teachers adequately prepared prior to their student teaching assignment? This question points first at the college curriculum which has given the student his formal training and second at the student orientation just prior to his student teaching experience.

Is the general student teaching handbook provided for all classroom teaching adequate to support the student teacher in an industrial arts teaching situation? Without a specific program guide, are the experiences adequate when obtained in a very random manner under an industrial arts teacher who is directing one specific laboratory program? Are classroom teaching experiences adequate to prepare a teacher of industrial arts? Just what experiences should be provided that have not been included in the general student teaching assignment?

Does the variation in laboratory training stations and supervisory personnel indicate the need of a uniform training program to insure the needed results of the

student teaching program in this field? Does a training program requiring the development of special areas in a laboratory program indicate the need for supervisory personnel with training in those areas? The installation of trained supervisors in every field of education may be impossible where the teacher training program is spread over the entire state. Should student teachers who are being supervised by personnel not in their own field be provided with a guide or assignment to better direct their experiences? Should the supervisors also be provided with a guide for evaluating and helping industrial arts student teachers?

II. IMPORTANCE OF THE STUDY

The development of industrial arts to its full position in general education depends upon the capabilities of the personnel who staff the program throughout the country. A high percentage of well-qualified beginning teachers cannot be expected from a training program not directed at the highest standards of industrial arts.

The Industrial Arts Department of Central Washington College is not large in terms of staff or students. Communities offering student teacher training facilities for industrial arts student teaching are scattered. These circumstances throw student teachers into a wide variety of

programs in terms of supervision, instruction, and laboratory facilities. This variety is good if well-organized and directed so that experiences are not haphazard events which occur spontaneously. A consistent training program is difficult to provide even under the most uniform conditions. Under conditions which are less than ideal, student teaching experiences are apt to be at the discretion of personnel in the various communities which have provided facilities for student teachers.

III. LIMITATIONS OF THE STUDY

Central Washington College has graduated an average of 249.9 students with the B. A. degree in Education each year from the fall of 1949 to the summer of 1958. Of that number, an average of 9.3 students per year have graduated with a B. A. in Education majoring in the field of industrial arts. Because this study was based on the opinions of these industrial arts graduates now actively teaching in industrial arts, it was limited by the small numbers involved in the survey. During the ten-year period (1949-1958) included in this study, 93 industrial arts majors have gone into the teaching of industrial arts, but not all have remained in this field. Twenty-four per cent of these teachers have left the industrial arts field during this time.

Variations in the location of cooperating schools and the philosophy of cooperating teachers which helped to prompt this study also created problems in making an adequate survey. The 93 individuals who student taught in Industrial Arts between 1949 and 1958 had their experience in many schools under many teachers. No two teaching stations which these people worked in were the same with respect to physical setting or administrative philosophy. The students' wide range of interests coupled with the lapse in time since their training and the limited number of students in the survey made it difficult to evaluate their recommendations. An evaluation by practical application of the recommendations of the teachers in the survey group was impossible for this study because a number of graduates would have to experience a recommended program for one or more years in an actual teaching situation. However, some changes must be effected if the program for industrial arts student teachers is to grow according to the needs expressed by those actively engaged in teaching industrial arts.

IV. METHODS AND PROCEDURES

The Questionnaire

To facilitate the study of conditions faced by industrial arts student teachers, a questionnaire was

prepared concerning the adequacies of their teacher training program. A list of all industrial arts majors and minors graduated between 1949 and 1958 was prepared, and those whose names appeared in the 1960 State Directory of Industrial Arts Teachers were sent copies of the questionnaire. Those of this group who were teaching outside the State of Washington were located and placed on the mailing list.

The questionnaire was divided into four general categories and a check list prepared to indicate positive and negative reactions. Provisions for comments were included at the end of each category. Each question in the survey was evaluated separately or as they relate to each other and the general attitude toward each of the four categories was summarized. Pertinent comments are discussed and comments made on the questionnaire are all presented in Appendix A.

Participating Colleges

Colleges and universities in Washington and Oregon and several other selected colleges in the United States which provide training in the Industrial Arts were questioned concerning their program for student teaching in Industrial Arts. The following information was requested:

1. The guide for Industrial Arts student teachers
2. The specific assignment for Industrial Arts student teachers

3. The guide for Industrial Arts classroom supervisors

4. The guide for Industrial Arts college supervisors

A summary of current practices in other colleges will be presented from this information. A comparison will be attempted between the current practices in some selected colleges and the results of the questionnaire sent to Central Washington College of Education graduates.

Survey of Literature

A search for existing literature was conducted. One article located applies specifically to student teaching in a laboratory situation. This study (22:31-5), completed in 1953 at the State University of New York Teachers College, Oswego, New York, evaluated growth of student capabilities as a result of student teaching. A limited number of books are available on the general topic of student teaching and supervision.

V. DEFINITION OF TERMS

Student teaching. The period during which a student receives guidance in learning to assume responsibility as a teacher in the public schools.

Student teacher. Any college student who participates in the activities of student teaching.

Cooperating teacher. This term is now rather generally used to designate the public school classroom teacher who supervises student teachers. "Supervising teacher" is still very commonly used, although it may be confused with the term "college supervisor." The term "critic teacher" is also used to designate the classroom teacher. Either of these terms may be found in this thesis although a general reference will be made to the cooperating teacher.

College supervisor. A member of the college faculty who assumes responsibility for supervising or coordinating the student teacher's activities. This college staff member is responsible for assisting the cooperating teacher in planning the student teacher's activities, directing those activities from day-to-day, and evaluating student growth (5:ix-x).

Laboratory teaching station. The Industrial Arts "shop" is not an appropriate term to designate the activities of the program. A laboratory is a place where experiments are conducted. The Industrial Arts program is a laboratory program.

Administration. Routine administration in the classroom includes such tasks as the taking of attendance, making out report cards, the preparation and use of

bulletin boards, the adjustment of physical comforts, and accounting for text books. In the Industrial Arts program, administration also includes such items as tool maintenance, making out requisitions for supplies and repairs, and accounting for tools and materials supplied to students.

CHAPTER II

A SUMMARY OF STUDENT TEACHING IN INDUSTRIAL ARTS AT SELECTED INSTITUTIONS

The student teaching program in any college or university has been developed to meet the immediate needs of that particular school. Schools with a noted reputation in the Industrial Arts seemingly would have developed their student teaching in Industrial Arts more than a school not specializing in this field. It would seem that a school with a large staff and many students would progress faster because of a possibly wider range of experiences. With these things in mind, it would seem logical to call on such schools to aid in the development of a more adequate program for the small college.

Two groups of schools were surveyed for materials applying to Industrial Arts student teaching. The first group included the colleges and universities in Oregon and Washington. Because of their location, it was felt that these institutions would have experienced many of the same problems that exist at Central Washington College of Education. Of these schools, only one, Oregon State College, has an Industrial Arts Department of any great size. This is the only school in Oregon state providing industrial arts training. The second group of schools was

selected at random from those having a noted industrial arts program. Appendix IV contains a copy of the letters written and the addressees to which they were sent.

I. A DESCRIPTION OF MATERIALS RECEIVED

Communication between the industrial arts departments and the personnel associated with the student teaching program for industrial arts students takes many forms. Some of the guidance and assignment materials apply specifically to Industrial Arts and some is laid out for the general student teaching program. Elaborate systems of forms and reports are required to carry out the program in some schools whereas others are very informal in their approach. The introduction to student teaching in one school is printed and in another school the ditto is the method of reproduction. In almost every instance, the materials have one thing in common: to provide the student with an assignment. Literature pertaining to student teaching generally falls into three categories: the college supervisor, the cooperating teacher, the student teacher (general information and specific assignments).

II. THE POLICIES OF SELECTED SCHOOLS

The College Supervisor

Although very little material was received

concerning the supervisor's work, the University of Oregon and the University of Washington each provided some material directly related to the supervisor's activities. Most other schools provided only the evaluation forms used by supervisors in grading or rating student teachers. The following comment from a letter received from Oregon State College seems to typify the supervisory program at many schools:

> I have included several copies of materials issued to our students and supervising teachers. At present, we use the blue handbook for student teachers as a guide for supervisors, plus general knowledge gained from experience.

With the knowledge gained from experience, the college supervisor may provide the following services, as provided in the student teaching guide received from Oregon State College (30:1-2):

1. Works with the cooperating teacher and the student teacher in planning, executing, and evaluating a desirable program of laboratory experiences.
2. Assists the student teacher in preparation, use, and evaluation of appropriate instructional materials.
3. Assists the student teaching experience with regularly scheduled seminars (usually once a week).

4. Visits the classroom for first-hand information on the student teacher's progress as often as possible.
5. Evaluates the student teacher's growth with the aid of the cooperating teacher and the student teacher.
6. Writes a final evaluation of the student teacher.

The Cooperating Teacher

The cooperating teacher is well supplied with printed suggestions and guides for supervising the student teacher. Every school that responded to the letter returned some suggestions for the cooperating teacher. These suggestions are written in many forms: as a letter, as suggestions, as an activity list, and as a handbook. In each instance the responsibilities of the cooperating teacher are set forth in a permissive way so that the teacher may fit the student teaching program to the instructional program in the school. The following activities of the cooperating teacher were provided in written form by one or more of the colleges that submitted materials for this study:

1. His primary responsibility is to the cooperating school and the youth in his classes.
2. He will acquaint the student teacher with the community, the school, the classroom, and the

people in the school.

3. He will acquaint the student teacher with the policies of the school.
4. He will provide the student teacher with examples of good teaching and help in the planning of the student teacher's own teaching experiences.
5. He will provide as many opportunities in the classroom as the student teacher is capable of handling.
6. He will evaluate the student teacher's experiences constructively and as often as time permits.
7. He will assist the college supervisor in the final evaluation and recommendations made of the student teacher's work.

The Student Teacher

Materials for the student teacher were provided by colleges in response to the request for student teaching materials. The information handouts, assignments, and guides serve two purposes. These materials explain the program and the jobs of the people in it, and they provide the student with a specific assignment in terms of what, when, how, and why a particular job must be done. Some of the specific assignments to student teachers were written so as to eliminate much of the guesswork as to what the

student was to do. Others were quite vague, leaving a great deal up to the student and the cooperating teacher.

Introductory materials. Each of the schools cooperating in this study provides its student teachers with a handbook or guide to student teaching. In some instances this is the only material furnished the student teacher and the cooperating teacher. Usually this guide provides a general introduction to student teaching, with emphasis on specific problems and practices. Problems peculiar to subject matter areas such as Industrial Arts were not included in these guides. An attempt is made below to subdivide the introductory activities presented in the various guides obtained from these colleges and place them under general headings.

1. A general introduction to student teaching will point out the responsibilities of the student to the cooperating school, the college, and to the students themselves and the importance of the program to the students' future in teaching.
2. The orientation period provides time for the student to become acquainted with the school, the community, and the administration and policies of the cooperating school. Observation of the cooperating teacher provides the student with examples of teaching on which to base his own

preparation.

3. In an actual teaching experience, the student teacher will plan and deliver the instruction using all the teaching devices he is familiar with to control the physical and mental atmosphere of the classroom.
4. Activities of the school not experienced in the classroom will enrich the student teaching experience. Professional meetings, inductive observations, parent-teacher associations, and student activities are but a few of these experiences.
5. The student teacher must understand the purpose of evaluation and the methods to be used in evaluation of his teaching.

Specific assignment. The second type of information provided for the student teacher is a specific assignment. Colleges which provided material for this study offered widely varied methods of presenting student teaching assignments for industrial arts students. For presentation in this paper assignments have been organized in the order of their occurrence during the student teaching period. The way that the assignment is completed varies according to the requests of the college making the student teaching assignment. The following categories seem best to divide

the material presented:

I. Preliminary activities.

A. The student teacher must have some understanding of and be familiar with the school and the school district he is working in.

B. The student teacher must have some background in administrative policies of the school district.

C. The student teacher must understand the effects on the classroom problem of such items as school finances, transportation, kindergartens, attendance, and discipline.

D. The student teacher must understand his relationship to the school program. The University of Minnesota helped the student teacher prepare himself for student teaching by having him write out his expectations of the program. The following questions appeared on the form used in this evaluation (9:1):

1. What do you think you have to offer the students who will be in your classes during your practice teaching experience?

2. What do you expect to receive from your consulting teacher?

3. What do you expect or intend to do that will be of value to the consulting teacher with whom you work?

4. In your present thinking what will probably

be your greatest need as far as getting adjusted and "in the feel of things" is concerned?

5. In which area do you feel better prepared - the manipulative side of our work or in the theoretical side of teaching?

6. What do you expect to get from student teaching that seems uppermost or foremost in your mind - i.e., increased skills, knowledge of students, poise, confidence, etc.?

II. Classroom orientation.

A. Become acquainted with the administrative policies effecting attendance.

B. Understand the policies in effect for the use, operation, and maintenance of tools and equipment.

C. Know how materials are provided and accounted for.

D. Be familiar with the operation of the personnel system.

E. Become familiar with the teaching aids, resources, and materials available for the program.

F. Know the routine for all extra-class, extra-curricular, and professional activities participated in.

G. Understand the processes of evaluating and methods of recording pupil progress and

activities.

H. Become familiar with the complete course of study being presented to the pupil.

I. Investigate the background of and become acquainted with the pupils in the classes.

III. Planning activities.

A. Prepare a calendar of events covering the time available for student teaching.

B. Write a course of study covering the activities the student teacher will present.

C. Write a unit of study for each subject to be presented.

D. Prepare detailed lesson plans of each presentation to be made.

E. Use as many different methods of presentation as possible (job sheet, bulletin board, blackboard, film, mockup, etc.).

F. Construct a permanent teaching aid and use it in conjunction with a class of instruction.

G. Use as many outside resource materials as possible.

H. Prepare for student differences.

I. Determine the method of evaluating the pupils' work.

IV. Presentation.

A. Organize and maintain the physical comforts of the room during the learning period.

B. Secure the attention of the group.

C. Work with the entire group.

D. Use correct English-- speaking and writing.

E. Be enthusiastic about the material presented.

F. Present an accurate and understandable assignment.

V. Miscellaneous activities.

A. Term project. The purpose of the term project is to give the cooperating teacher an opportunity to better evaluate the student teacher in terms of his ability to recognize needed additions or improvements to the shop or program and to plan and organize his own and/or his students' time to successfully carry this project to completion.

B. Inductive observation. The purpose of these observations and the reports based on them is to assist the student in the necessary transition from thinking about teaching to accepting the full responsibility of teaching. It is directed toward obtaining information which will most effectively help in the student's adjustment to conditions presented by

each specific teaching assignment. Students are expected to visit several school shops.

C. Case study. The case study is used to familiarize the student teacher with the use of student records and counseling facilities.

Student evaluation. The evaluation of the student teaching assignment is one of the most vital parts of the program. Two things should be evaluated in the student teaching experience according to colleges which provided the reference material for this study: everyday activities and overall growth during a certain period of time. Evaluations generally are provided by two sources, the college supervisor and the cooperating teacher. The responsibilities of supervisory personnel have been presented on pages 13, 14, and 15 of this chapter.

III. SUMMARY

It is interesting to note that the majority of materials presented in this chapter are related to the specific assignment to student teachers. Those colleges which provided the industrial arts student teaching materials for this study recognize that there is more to teaching and teaching Industrial Arts than getting up in front of a group of children. The student teacher is

expected to acquaint himself with the school, the children, and any related information or materials. He is expected to become familiar with the classroom or laboratory as it is set up to meet the needs of the students, the instructor, and the school. The student teacher should know how to plan a program of instruction so as to cause desired changes. His experiences as a beginning teacher must be adequately evaluated or they will not afford him maximum growth. The industrial arts student teaching assignments have been provided in addition to a student teaching bulletin or guide.

No special requirements have been established for the college supervisor of industrial arts student teachers.

The cooperating teacher must familiarize himself with the needs of the student teacher and provide experiences to meet those needs. Because of the limited time available, the student teacher cannot be familiar with all of the operation of an industrial arts laboratory. The cooperating teacher must structure the program he is presenting so as to provide as many experiences as possible in the time the student teacher is available for instruction.

The effectiveness of the student teaching program depends on the organization of the entire program with respect to assignments, supervision and evaluation, and opportunity to experience and solve teaching problems.

CHAPTER III

EVALUATION OF THE PROGRAM BY EXPERIENCED TEACHERS

I. THE GROWTH OF STUDENT TEACHING AT CENTRAL WASHINGTON COLLEGE OF EDUCATION

Student teaching at Central Washington College has grown and gone through many unrecorded changes. Changes in personnel and administration on the campus and in the cooperating schools have effected changes in the student teaching program. The college maintains an experimental school for developing teaching practices. For many years, this school has played an important part in the student teaching program. The Ellensburg public schools at one time provided nearly all the classrooms that were required for student teaching. At the present time, the program has been expanded to include the Yakima, Wenatchee, Bellevue, and Vancouver public schools. Many other teaching stations in the state are open to student teachers on request.

In the industrial arts student teaching program, several important developments must be noted. At one time, the student teacher was permitted to teach in the laboratory class one full day. This was deemed unsatisfactory, as it was felt that the student should have a broader background that would enable him to work in more than one area on more than one level. From this time on, the industrial

arts student had to teach one-half day in a classroom and one-half day in an industrial arts program. After a short period of time, some public schools announced they would accept students only on a full day teaching basis because of scheduling and other administrative considerations.

When students from Central Washington College of Education started student teaching in school districts other than Ellensburg, supervisory personnel in the department in which the college student majored could no longer serve as supervisors. For example, it would have been very impractical for the Industrial Arts Department to provide supervision of the persons who might be student teaching in Vancouver, Wenatchee, Bellevue, or Yakima. Because of the distances involved, one college instructor was usually assigned to supervise all student teachers in a given school district. This meant that the cooperating teacher and the student teacher in the industrial arts program were left to devise their own training program if the college supervisor was not familiar with Industrial Arts. While the transition from part-time supervisors who are specialists in one area to full-time supervisors offers some advantages in terms of immediate and more frequent supervision, it would seem advantageous to have some control by the department involved if adequate results are to be expected.

II. THE SURVEY AS IT RELATES TO THE PAST PROGRAM

The evaluation of the development of the student teaching program is made by teachers who have put their training into practice. For purposes of the evaluation, the investigation has been divided into four parts: training, supervision, teaching, and administration.

Training. At the beginning of the student teaching experience, the student generally has had classroom instruction in basic and professional subjects. The student's mastery of the subject matter offered should determine in part the readiness of the individual to begin student teaching. The purpose of this section of the questionnaire was to determine if this part of the training program has provided a maximum background for students entering student teaching.

Supervision. The supervisors of student teachers have been provided by different departments within the college. Cooperating teachers have worked out many different training programs for their student teachers. Supervisors and cooperating teachers adequately trained and carefully coordinated will develop a consistent training program for student teachers.

Teaching. The evaluation of a list of experiences

which are commonplace in the classroom indicates the adequacies of the programs which have been followed.

Administration. Special training which is of importance to the laboratory teacher should receive attention in student teaching. It would be difficult to include in a college curriculum all problems that are encountered in organizing and administering an industrial arts program. The student teaching experience should provide for such as the maintenance of equipment and the ordering of and accounting for supplies.

III. AN EXPLANATION OF THE SURVEY POPULATION

This survey was limited to the experiences of industrial arts teachers who graduated from Central Washington College of Education during the last 10 years. Teachers may have had only a part of their preparation at Central Washington College of Education but must have had their student teaching experience there. Between 1949 and 1958, 93 industrial arts majors and 124 industrial arts minors graduated from the school. Of this number, 71 were located as active instructors in the industrial arts field. The attrition rate was 24 per cent over the 10-year period. The majority of students with 3 minor fields of preparation teach in the elementary schools.

Eighty-seven questionnaires were sent. However,

when the State Directory of Industrial Arts Teachers for Washington State, 1959, was distributed, it was found that a number of teachers were no longer active in industrial arts. At the final count, 71 industrial arts teachers who graduated between 1949 and 1958 were found to be actively teaching industrial arts. Of these, 81.69 per cent responded, a total of 58 returns from 71 requests.

Although the number of returns (58) may seem small, it should be remembered that all graduates of the Industrial Arts Department in this time period were contacted. An increase in the number of graduates to be considered could have been accomplished by involving earlier graduating classes. This was deemed inadvisable because of the increased attrition rate and length of time over which individuals would have to recall information.

IV. AN EVALUATION OF THE SURVEY TOPICS

Evaluation of Undergraduate Training Prior to Student Teaching

The evaluation of undergraduate training is presented in Table I, page 32. Reactions to the subjects listed indicated a greater degree of sensitivity toward professional rather than general subjects. Most persons felt adequately trained in English, History, and Science. However, 38 per cent indicated that their preparation in

mathematics was inadequate. Several statements were added here indicating a desire to see some mathematics required of prospective Industrial Arts teachers.

As evaluated by the replies to the questionnaire, the education program seems adequate. However, twenty-five and nine-tenths per cent indicated a feeling of inadequacy in their preparation in teaching methods. One comment which seemed rather pertinent was stated as follows: "On teaching methods - when I say 'inadequate' I don't want to imply that there should be more." Several other comments which seemed to back up this statement requested more practical application and less philosophy and theory (see Appendix A).

Real deficiencies in training are indicated in the Industrial Arts areas. Of the teachers, 41.4 per cent indicated the need for greater emphasis on technical information. This is the material that the teacher in Industrial Arts must teach. Contrary to the results of this questionnaire, it is felt that students enrolled in undergraduate training are requesting less technical information and more projects or work on skills. This would indicate that prior to on-the-job training, the prospective teacher does not feel the same about what he needs in the way of education as do the trained and experienced teachers. Most teachers, 81 per cent, feel that they are

adequately trained in skills.

Of the teachers polled, 46.6 per cent stated that preparation in teaching methods in industrial arts were inadequate. Comments indicated that more time should be spent learning the techniques of presenting information rather than building projects and listening to theory. Yet, 25.9 per cent of the questionnaires indicated a need for additional philosophy or understanding of Industrial Arts.

Generally speaking, there is a feeling of adequacy toward undergraduate training. General comments on this page of the questionnaire indicated, however, that more practical application of teaching methods and the material that a teacher must teach should be offered to prospective teachers. This applies to both general and professional subjects.

TABLE I

EVALUATION OF UNDERGRADUATE TRAINING
PRIOR TO STUDENT TEACHING

Subject matter listed on the questionnaire		Number adequate	Number inadequate	Per oent adequate	Per cent inadequate
General	English	47	11	81	19
	History	55	3	94.8	5.2
	Mathematics	36	22	62	38
	Science	49	9	84.5	15.5
Education	Psychology	56	2	96.5	3.5
	Teaching methods	43	15	74.1	25.9
Industrial Arts	Technical information	34	24	58.6	41.4
	Skills	47	11	81	19
	Teaching methods	31	27	53.4	46.6
	Philosophy	43	15	74.1	25.9

Evaluation of Supervision Received

From the college. Responses to the questionnaire about the supervision received from the college during the student teaching period are presented in Table II, page 36. The evaluation of the supervisory program indicated some startling problems, not only with respect to the supervisor but also in regard to the procedures he followed.

For a period of time a number of students received teacher training in two subject areas. Usually one-half day was spent in industrial arts and one-half day was spent in a classroom teaching situation. Most of the teachers (86.2 per cent) in the study indicated that they had been assigned to student teach in their field of preparation. Of the 13.8 per cent who were not, several commented that they had taken assignments in other areas by choice. This indicates that student teaching assignments have been generally adequate.

Simply assigning a student to a classroom for student teaching does not indicate that he is a teacher and knows what to do after he gets there. Responses to questions 3 and 6 of Table II, indicate that some attention should be given to the student's preparation and assignments for student teaching. Only by understanding what is expected of him, what his responsibilities are, and how to go about his duties can the student teacher be expected to

perform to satisfactory standards.

Student teaching supervisors were not industrial arts personnel, as was indicated in 34.5 per cent of the replies. Although this would account in part for the lack of assignments pointed out in the previous paragraph, it does not justify it. Personnel unqualified as supervisors in a particular field should be all the more concerned with procedures and assignments to insure an adequate performance by the student.

These inadequacies in supervisory personnel are more seriously implicated since 48.3 per cent of the teachers answering the questionnaire felt they were not adequately observed and 46.8 per cent felt they were not adequately evaluated. There are three possible reasons for this: a lack of time to handle the load expected of a supervisor, being unqualified and not knowing what to look for, and a lack of interest on the supervisor's part in the work expected of him. Student teaching is a necessary experience in the development of a potential teacher. Adequate experiences can occur only if the prospective teacher is adequately informed, properly directed, and competently evaluated.

From the cooperating teacher. It is the duty of the cooperating teacher to prepare situations in his schedule where the student teacher may assume the responsibilities

of teaching. Because the cooperating teacher is responsible for the proper content of instruction in his classroom, he must direct the activities of the student teacher day-by-day and period-by-period. If the student's experience is to be complete, it must include experiences in as many classroom activities as possible. The survey indicates that these experiences have not been adequately administered. Of the teachers polled, 27.6 per cent indicated that as student teachers they were not aware of the complete semester program being presented to the pupils, that they were not assigned daily teaching problems, that they were not required to develop a complete teaching unit, and that they were not adequately supervised in their work.

An adequately supervised program can be a most rewarding experience. The following positive comment taken from the survey supports this statement: "My classroom supervisor was the best. He taught me more in one quarter than college did in 5 years." However, remarks on the survey indicate that too frequently the supervision was inadequate as seen by the experienced teacher. The following comment is typical, "There was no plan of experiences."

TABLE II

SUPERVISION ADMINISTERED BY THE COLLEGE

Subject matter listed on the questionnaire	Number yes	Number no	Percentages yes	Percentages no
1. Were you assigned in the field of your preparation?	50	8	86.2	13.8
2. Was your advisor a qualified industrial arts person?	38	20	65.5	34.5
3. Were you instructed on approaching the classroom as a student teacher?	39	19	67.2	32.8
4. Did your advisor observe the various situations that you were exposed to?	30	28	51.7	48.3
5. Did your advisor's visits include adequate evaluations?	32	26	53.2	46.8
6. Were you given definite teaching problems to work on?	35	23	60.3	39.7

TABLE III

SUPERVISION ADMINISTERED BY THE CLASSROOM TEACHER

Subject matter listed on the questionnaire	Number yes	Number no	Percentages yes	Percentages no
1. Were you made aware of the complete semester or term program?	42	16	72.4	27.6
2. Did you have daily teaching problems?	44	14	75.9	24.1
3. Were you assigned complete teaching units?	42	16	72.4	27.6
4. Were you assigned regular administrative duties?	26	32	44.8	55.2
5. Were your assignments supervised?	44	14	75.9	24.1
6. Did your supervisor adequately evaluate your daily activities?	35	23	60.3	39.7

Evaluation of Experiences Provided

A satisfactory student teaching experience must include as many teaching problems as possible. If these experiences in classroom administration and instruction activities are not adequate, the program is not successful. The experiences selected and evaluated in Table IV indicate a wide variation in training. Actual teaching experiences in laboratory and classroom environments with both individuals and groups of students seem to be adequately provided for. However, the evaluation of pupil performance, an important part of teaching and learning, often seems to have been neglected. Apparently, cooperating teachers have felt that the student teacher was not well enough acquainted with the pupils to evaluate them adequately. This is further demonstrated by the extreme reluctance of the cooperating teacher to have the student teacher participate in counseling activities either on a group or individual basis (see questions 5 and 6 of Table IV, page 40).

Many teachers indicated that their training in methods both in education and industrial arts was inadequate (Table I). Methods training has been further neglected in the student teaching program by poor use of laboratory and classroom teaching aids. Of the teachers who responded to the survey, 48.3 per cent felt that their

experience here was inadequate. Apparently, the use of teaching aids has been weakly presented to the student teacher by the cooperating schools.

Many experiences which should be provided for a prospective teacher are seasonal. Of the teachers in the survey, 51.8 per cent indicated that they had not experienced the organization and operation of an effective personnel plan. It is very difficult to provide September experiences in April. However, many of the details in laboratory organization and administration can be covered by the student teacher with an adequately prepared assignment.

Question number 11 on Table IV asked the following: "Did your student teaching situation allow you to meet the requirements of the assignments given you by the college?" Twenty-four and one-tenth per cent of the teachers returning the questionnaire replied in the negative. Typical comments which followed read: "I don't believe I received any assignments," or "Our only assignment was to keep a diary." This confirms the negative comments set forth on Tables II and III concerning the adequacy of supervision.

TABLE IV

EVALUATION OF CLASSROOM EXPERIENCES

Rate the following experiences	Number adequate	Number inadequate	Per cent adequate	Per cent inadequate
1. Teaching in a laboratory environment.	46	12	79.3	20.7
2. Teaching in a classroom environment.	48	10	82.7	17.3
3. Working with individual students.	51	7	87.9	12.1
4. Organizing and operating a student personnel plan.	28	30	48.2	51.8
5. Counseling in a homeroom situation.	19	39	32.7	67.3
6. Counseling individual students.	20	38	34.4	65.6
7. Development of laboratory and classroom teaching aids.	30	28	51.7	48.3
8. Evaluation of student projects.	42	16	72.4	27.6
9. Evaluation of classroom work.	43	15	74.1	25.9
10. Evaluation of student performance.	41	17	70.7	29.3
11. Did your student teaching situation allow you to meet the requirements of the assignments given you by the college?	44	14	75.9	24.1

Provisions for Industrial Arts Administrative Experiences

The industrial arts laboratory provides some problems which are not encountered in the classroom teaching station. Provisions for training in these areas are not always available in the college curriculum. Experiences with records and in maintenance offer some real problems to the beginning teacher. Generally the public school administrator will have to rely on the teacher for any recommendations involving changes or routine upkeep. If the new teacher has had no experience in these matters, it may be extremely difficult for him to make valid comparisons or make suggestions valuable to the administration.

Table V indicates that in nearly all areas administrative opportunities have not been provided. The maintenance of tools and equipment can be expensive and time consuming. Nearly 70 per cent of the replies in the survey indicated that they had been adequately trained to take care of hand tools, but only 41.3 per cent indicated training in maintenance of power equipment. Several comments were emphatic in stating that courses in shop maintenance should be offered (see Appendix A).

The operation of an industrial arts laboratory requires many supplies and materials. These supplies must be continually replenished and the needs for them revised to be up-to-date and in good order. Table V shows that

this area has been all but neglected. Of the teachers responding to the questionnaire, 8.6 per cent have had experience in accounting for resale supplies, 6.9 per cent have had experience with an inventory, and 12.1 per cent had been exposed to the planning for and ordering of new equipment.

Parent-teacher relationships are extremely important in the industrial arts program. Pupils for the most part are in an elective area of instruction. Often a financial burden accompanies the program. An understanding by parents of the objectives of the program, a feeling of satisfaction by the pupils, and some actual physical returns for the investment made are necessary for the continuation of a strong program. Seventy-four and two-tenths per cent of the teachers responding to the questionnaire indicated no experience in parent-teacher relationships, either in the development of a sound program of industrial arts or in an actual contact with a parent.

TABLE V

EVALUATION OF INDUSTRIAL ARTS ADMINISTRATIVE EXPERIENCES

Did your student teaching experience provide you with industrial arts administrative experience in the following areas?		Number yes	Number no	Percentages yes	Percentages no
Maintenance	Hand tools	40	18	68.8	31.2
	Power equipment	24	34	41.3	58.7
	Room facilities	33	25	56.9	43.1
Records	Ordering resale supplies	5	53	8.6	91.4
	Resale accounting	8	50	13.8	86.2
	Inventory	4	54	6.9	93.1
	Planning for and ordering new equipment	7	51	12.1	87.9
	Report cards	33	25	56.9	43.1
	Permanent records	17	41	29.3	70.7
Parent-teacher relationships		15	43	25.8	74.2

V. THE ADEQUACY OF PREPARATION FOR TEACHING

At the conclusion of the questionnaire, the following question was asked: "Do you feel that you were adequately prepared to begin your first teaching job?" The comments made are listed in Appendix A. In these comments there seem to be two general trains of thought: first, that the student teacher was not adequately prepared, and second, that the training was as adequate as the student teacher made it. Many weaknesses were pointed out in undergraduate training, student teaching, and personnel attitudes. Many of the same weaknesses were positively accounted for in the comments.

In the survey as a whole, several striking points must be emphasized. First, training in teaching methods were evaluated as inadequate. Numerous comments were contributed concerning the effectiveness of the methods presented. Second, supervision has been inconsistent at best, with respect to assignments, counseling, and evaluation of the student teacher. Third, many experiences which should be provided for in student teaching or college training had not been covered.

CHAPTER IV

RECOMMENDATIONS BASED ON THE PRECEDING STUDIES

I. REVIEW OF THE PROBLEM

The industrial arts teacher is concerned with the responsibilities of a laboratory-type program in addition to academic teaching problems. Chance selection of cooperating schools, cooperating teachers, and college supervisors should not be the determing factor of the program offered the industrial arts student teacher. Educational experiences in the college prior to the student teaching experience provide the student with the tools for teaching. Further preparation for student teaching should be provided by the presentation of a specific assignment. The evaluation and instruction given with the experiences in student teaching will determine the effectiveness of that program. The question, then, is how adequate is the knowledge gained in pre-student teaching instruction, supervision during student teaching, and experiences received during student teaching for the industrial arts student at Central Washington College of Education.

Experienced industrial arts teachers who have had their training at Central Washington College of Education have evaluated their student teaching experiences. Their

evaluations are based on their college training and their experiences in the teaching profession. The comparison of their evaluation of the education they received at Central Washington College of Education and the programs for student teaching which are in effect at other institutions has provided the basis for recommending improvement in the present program.

II. RECOMMENDATIONS BASED ON THE STUDY

Pre-Student Teaching Instruction

The industrial arts student teacher is trained in several areas in preparation for the teaching experience. General subjects such as mathematics, science, history, and English; education subjects such as psychology, education methods and administration; and industrial arts courses in woodwork, metalwork, and drawing all play an important role in the student's preliminary preparation. In these areas there are several subjects which need to be discussed. Of the graduates who replied to the questionnaire, 19 per cent indicated that their English training was inadequate. The indication of inadequacy could mean several things: formal English training is not meeting the needs of the students, or practical application of the English language in other subject areas is not what it needs to be. Further investigation of this matter should be made to determine

where the needs are in the development of an adequate English program.

Of the teachers in the study, 38 per cent indicated that their preparation in mathematics was inadequate. There were four comments on the questionnaire relating to preparation in mathematics. Three of these comments indicated a need for a college course in mathematics for all teacher candidates. One comment stated the need for a course designed to fit the needs of the industrial arts teacher. Two problems are brought out here. What are the reactions of teachers in other areas toward preparation in mathematics? If their reactions parallel the comments made by the industrial arts teachers, some work should be done by the college to remedy this problem. If the experienced inadequacies are peculiar to the industrial arts teacher, then the Industrial Arts Department should effect a mathematics program to meet the needs of their people.

Teaching methods for industrial arts students are taught by the Education Department and the Industrial Arts Department. In the survey, 46.6 per cent of the teachers indicated that industrial arts teaching methods were inadequate. Comments on the questionnaire indicate a need for improvement in the program. The professional education program should be studied very carefully to eliminate repetition in classes on teaching methods. In this same

area the need for more practical application in teaching procedures has been indicated. It is suggested that instructors with outstanding ability, who have proven their understanding of classroom teaching, should be provided to teach classes in methods. In the Industrial Arts, the teaching of methods should be directed more specifically at the materials the future teacher will have to teach in his own classroom or laboratory. It is of importance to note that many recent changes have been made in course offerings of the Education Department and for that reason the recommendations made on the basis of this study probably apply to what used to be rather than to the present situation.

A definite inadequacy in training has been indicated in the Industrial Arts in technical information, skills, teaching methods, and philosophy. Teachers in industrial arts apparently are most critical of the program with which they are familiar. As indicated on Table I page 32, the industrial arts teachers have said in effect: I know how to perform an operation, but how do I teach it, what information must be taught, and how do I sell my program to the public? Philosophy, technical information, and teaching methods are the tools of the instructor in industrial arts. If the teacher is not adequately prepared, and he feels he has not been, the industrial arts

program is going to be weakened by the loss of teacher candidates, as was indicated by the following comment on one questionnaire: "I am teaching in elementary now, and I enjoy it much better than secondary. Mainly because I feel I was not prepared well enough in methods."

Supervision Received from the College

Shortcomings of the college supervisory system are due in part to the small number of industrial arts students accommodated by any one community or school. This same inadequacy, however, can be overcome by prepared instructions to personnel assigned as supervisors. These supervisors must be provided with the time necessary to supervise and evaluate student teachers. This is the responsibility of the college administration. Because college supervisors are from the education department and are not trained in every field of specialization, they must be provided with instructions by the department concerned as to their responsibilities to the student teachers from that department. Most important, the student teacher must have an assignment to direct his efforts; without this the supervisor from the college will have little on which to base his evaluation. The survey shows that in the years 1949 to 1958, 39.7 per cent of the teachers who have graduated from Central Washington College of Education as industrial arts majors in education were not provided with

definite assignments.

Chapter II indicated that colleges which provided materials used in this thesis agree with the need for a student teaching assignment (see page 16). These same schools have indicated that supervisors are to visit their student teachers once every two weeks or as often as possible and hold weekly seminars on teaching problems. Assignments prepared by the various departments (i.e., industrial arts) are an aid to supervisors in assisting the student teacher with the preparation, presentation, and evaluation of instruction.

Supervision Received from the Cooperating Teacher

The role of the cooperating teacher was better received by the teachers responding to the questionnaire than were the areas of supervision and assignment. A lack of experiences in student teaching was indicated because the cooperating teacher did not have an adequate plan from which the student could work. A complete orientation program and good planning and teaching experiences evolve from a well-prepared overall plan for the student teacher. Further study of performance in supervising and evaluating student teachers should provide information of cooperating teacher's activities with the student teacher.

Colleges which provided literature for this study

indicate that they have prepared instructions for cooperating teachers which parallel the assignment provided for the student teacher. These instructions cover the same general outline as the assignment and make recommendations for implementing the student teacher's program.

Evaluation of Experiences

Of the comments made concerning the adequacy of student teaching experiences, eleven out of seventeen remarks, page 3 of the questionnaire, were negative. The inadequacies in teaching experiences indicated on Table IV, page 40, and Table V, page 43, could be corrected by definite student teaching assignments for industrial arts. Colleges contributing materials for this thesis have specific assignments to provide the student teacher with experiences that take place over the entire school year. Student teaching experiences not properly planned and supervised would provide opportunities in only those events likely to occur while the student teacher was in the classroom.

III. SUMMARY AND RESTATEMENT OF THE PROBLEM

The problem of this thesis was divided into three parts: first, the curriculum to which the industrial arts student has been exposed prior to his student teaching experience; second, the supervisory system guiding the

industrial arts student teacher; and third, the experiences the industrial arts student teacher is exposed to during his student teaching class.

Replies to the questionnaire indicate that English and mathematics instruction has not met the needs of the industrial arts student. Methods instruction has been too theoretical (has not provided adequate practical application). Industrial arts courses have not provided adequate technical knowledge, industrial arts philosophy, and industrial arts methods. Personnel in position to direct the activities of the departments involved should study these problems and effect changes as required to meet the needs of the industrial arts student and others if they are implicated.

This study sought evidence of growth in the programs mentioned over the ten years studied through the questionnaire. There was no perceptible change in the percentages of positive and negative replies to the questions in the years from 1949 to 1958.

Supervisory personnel on the college and public school level have not been adequately provided. Many persons have worked as supervisors, and in some cases they have worked out their own programs. The difficulties were complicated because many supervisors were not acquainted with the industrial arts program and did not know what the

department expected. The nature of the student teaching program at Central Washington College of Education makes it impossible to provide trained industrial arts personnel as supervisors for student teachers who are scattered over the state. Persons who assume the responsibilities of supervisor should be provided with instructions pertaining to the organization and evaluation of an adequate experience for the industrial arts student teacher.

Cooperating teachers must be provided with instructions regarding the needs of the industrial arts student teacher in order that adequate experiences can be organized.

The experiences which the industrial arts student teacher has had in the student teaching program relative to laboratory administration and classroom supervision and teaching have not been satisfactory because they have not been adequately planned. These experiences have been left to the discretion of cooperating teachers who were concerned primarily with the effectiveness of their teaching station. This is only as it should be; however, consideration for the success of the industrial arts student teacher should not have been neglected. An assignment indicating the experiences which should be provided and some activities to follow in filling these experiences has been provided by a supervisor in the Industrial Arts Department at Central Washington College (25). Guides for college supervisors

and cooperating teachers which parallel this assignment would increase its effectiveness.

The student teaching program has grown and changed during the past ten years at Central Washington College of Education. However, teaching graduates of the college indicated that student teaching in industrial arts between 1949 and 1958 had not improved proportionately. Adopting a set of standards for the student teaching program should improve the preparation of the teacher candidate. This set of standards would begin with the preparation of the student for student teaching. It would include the criteria to guide supervisory persons and it would aid cooperating teachers in organizing experiences that would provide the student teacher with a maximum exposure to the teaching program. This set of standards or student teaching assignment (as it may be called in its final form) should help all of the departments of the college to work together in producing a finished product, the beginning teacher.

It is hoped that the material provided in this study will be of some value in continuing improvements initiated by the various departments of the college concerned with directing the development of future teachers.

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APPENDIXES

APPENDIX A

This appendix contains the written comments taken from the four pages of the questionnaire. Comments are listed by pages and in most cases refer to the questions which occurred on that page of the questionnaire.

COMMENTS PAGE I

1. I feel that in most areas I was well prepared for student teaching.

2. I think Central should require one math course for all teachers. Also, there should be a drawing class separate from the pre-engineering class. The education classes could be deemphasized with more emphasis placed on the actual student teaching.

3. I am teaching in elementary now, and I enjoy it much better than secondary. Mainly because I feel I was not prepared well enough in methods.

4. I think that Industrial Arts in college should be presented as a preparation for teaching, not a construction experience. As dull as it might seem to the student in the classes, each unit to be covered by the Junior High and Senior High student should first be covered by the teacher. There are many things that I did not receive as far as tool operations when I constructed my two or three projects. Classes I would like to see at Central:
   1. Shop purchasing - 2 hour.
   2. Wood shop demonstrations - 3 hour.
      A student in this class would have to cover all tools and machines and their operations and be able to give a demonstration on all the tools in the shop.
   3. Metal shop demonstrations - 3 hour.
      Same as above, but dealing only with metal shop.
   4. First Aid required for all shop instructors and taught by a shop instructor - 2 hour.
      Safety and First Aid from the American National Red Cross. What, When, and How, to take care of an accident in your shop.
   5. Mechanical Drawing Teaching Techniques - 2 hour.
      A class designed for a man who will teach drawing.

5. Less Philosophy - more technical information in I. A.

6. I think a course in basic math or geometry would be very helpful - this should be required.

7. Teaching methods both in general education and I. A. are up to the personal attitude and ability of the individual.

8. Quite thorough, well organized, and interesting in my opinion.

9. Student teaching should allow more time for viewing the head teacher at work and not as much paper work. I found that if it was thought you had a free minute, you were given something to do "just to do something."

10. More skills could be taught or demonstrated to all beginners.

11. Handwriting and spelling - speech and public speaking - short here. The use of and variation in methods of presentation, real value of aids.

12. The only criticism I would have of the questionnaire would be in an occasionally misspelled word.

13. When I say adequate, I do not mean the best. Adequate in the sense that you were qualified to teach but a more extensive job could have been done in certain areas. (So many of the method courses are duplicated - it's easy to apply a good set of methods to any area).

14. This doesn't tell you how much of each we had to make us feel that it was adequate or inadequate.

15. Do you mean - was prior training adequate in my own judgment for any type of practice teaching, or for my particular assignment? I'll assume you mean for any type. Generally speaking, it was adequate for teaching industrial arts, but wouldn't have been in some areas for grade school.

16. Central Washington has a good program for undergraduate study.

17. 1. Feel some math should be required of all teacher candidates - and opportunity for advanced math encouraged.
    2. Most methods courses too abstract for student without class room experience to base it on.
    3. Strongly recommend <u>Teaching Industrial Arts</u> and

Teaching Multiple Activities in Industrial Arts by Silvius and Currey as basis for I. A. methods. Very practical. A bit more should be done in project analysis and development of courses of study.

18. Too much "ideal" theory and not enough practicality given it. Summer schools as an undergraduate were very enlightening with the experienced teacher back giving their workable knowledge. This was especially true in the Educ. courses. I felt a real need for more preparation in preparing the yearly order for supplies and materials, repair of power tools and machines, "tricks of the trade" in teaching a shop class, and a sequence of projects through the various construction difficulties for the beginning student with the average Ind. Arts setup (shop).

19. Too many people teaching them, part never have been out teaching.

20. On teaching methods - when I say "inadequate" I don't want to imply that there should be more.

21. C. W. C. had a very limited program in I. A.

22. I don't think my teaching methods helped me much. OK for establishing a philosophy but not for specific things I should or should not do.

23. A course in some type of shop mathematics would be helpful to an Industrial Arts major. Also a class in keeping shop records would be good.

COMMENTS PAGE II

1. There should be more evaluation by the college advisors.

2. I feel I have very inadequate student teaching conditions. I only taught one actual class and it was looked on by the regular teacher.

3. My classroom teacher was only present the first 15 minutes of the first day. Then I had the class. "Good or Bad Teaching Units" very poor introduction to class.

4. My time was equally divided between two teachers - the value I received was completely different with each. Depending on the teacher, the answers above could be yes or no.

5. Question 3 too general.

6. No. 1. Assigned Ind. Arts and classroom a good combination.

7. College supervisor did not have the time to spend with me that he should have had. Lack of specific assignment from the college.

8. I believe these are good questions. I hope they shed some light on the poor student teacher supervision program. I did not have any supervision at all - either college or supervising teacher.

9. Being able to do your student teaching in the same town as the college is located has its advantages. Supervision is much closer and people are better qualified because of the close contact.

10. I started out with a 3 minor program - Ind. Arts, Ecn. and Health & P. E. and thought it best to try straight 5th grade. After my practice teaching experience I decided I didn't want 5th grade and then during the summer concentrated more on Ind. Arts. (Nos. 1 & 2) I think you are assuming that all I. A. instructors started out to be just that. This isn't the case in my situation.

11. I did my practice teaching for one full quarter at

Hoquiam, Washington in actual teaching situation. I taught metals, wood and drawing in Jr. and Sr. high levels.

12. I teach crafts in the seventh grade along with three other academic courses in the seventh grade.

13. The supervision I received contained very little information.

14. No. 2 - He needs to teach in a public school.

15. My advisor came in once.

16. My classroom teacher, Mr. Balman, in Cle Elum was the best. He taught me more in one quarter than college did in 5 years.

17. It was a good experience, but it could have been better.

18. There was no plan of experiences. I merely went to the shop and helped (manipulative) students that needed it. On occasion, I presented a single lesson as it seemed desirable.

19. My supervisor was sick for five weeks. I taught all of his classes for that time. Six a day.

20. No. 6 - would be yes, but we had a choice as to the unit.

COMMENTS PAGE III

1. The student I. A. teacher should be assigned a classroom as well as a shop situation. Item #8, more emphasis should be placed on how the student makes the project and originality of design.

2. No. 11 - I don't believe I received any assignments.

3. No. 11 - None.

4. One teacher I had provided adequate opportunities. The other provided very few. The above answer could be both ways.

5. Nos. 3, 4, 5, 6 were gained mainly in Sept. experience. People who teach in a regular quarter may never get these.

6. No. 11 - No assignment given by college.

7. No. 11 - yes.

8. No. 11 - No assignment.

9. I tried to get ½ day in a classroom and could not. Personally feel that all I. A. student teachers should have some experience in classroom.

10. It's hard to say whether they were adequate or inadequate. They were experiences I had which was a help when I took over my first teaching assignment. I wasn't fired after the first year, so guess they were adequate.

11. I did my practice teaching in the C. E. S. which I feel is more of a lab. situation than a classroom situation. I never conducted a class for a whole day although I did have shorter blocks of time when I did take over the class.

12. I. A. courses in this area would be helpful, however, there is nothing like actual experiences in the field.

13. My advisor had no interest in student teachers to the best of my knowledge.

14. Practice taught in Cle Elum. Best shop instructor

I've met. Excellent practice teaching situation.

15. No. 6 - Too short a time in class for this. All books written on this subject are written by people never in a classroom and you will learn much - forget it a year then reread it again and try your own ideas. General comments not this page: Your main task and worry will be discipline and no one there will ever tell you a thing about it. It is a must in I. A. as in any class but more so in your field. Without it you will not teach. As of now, you cannot expect the better students in I. A. for the push is on for math and science. This has been very bad for your field. Enrollment there is down and the IQ of your students will be way below normal in most schools. This is not true at all schools but is now the biggest problem in front of I. A. today.

16. We had no assignments from the college except to keep a diary.

17. Under normal circumstances the college assignments could have been easily met.

1. Fairly well prepared in the laboratory area, but the classroom situation never was properly met by no classroom situation assignment.

2. No, I feel I just stepped into a spot and right out again.

3. Yes, except in those areas indicated above.

4. Yes, but could have used more technical information.

5. Yes, I found that my first year was quite easy. I think that more experience in ordering materials would be helpful.

6. Yes, with a philosophy fostered and developed by the teachings of three very fine men in the Industrial Arts Dept. at C. W. C. E., I feel I was adequately prepared.

7. Not in I. A. so I went to the elementary school for three years.

8. I think I was adequately prepared in most phases except disciplining students. I was very weak in the first few months of school.

9. No. My first job was 5th grade.

10. I do not. I prepared myself through the field of hard work on my part. No two shop situations need equal preparation.

11. My first teaching job was in the intermediate level - my student teaching (Jr. Hi.) was of very little value. However, my next assignment will be in the same identical position in which I practice taught, and I believe that the S. T. will be of some value, since my assignment will be in the subject in which I received the most experience.

12. Yes, I am very grateful for the help given me by my supervising teacher.

13. Yes.

14. I would have appreciated or benefited more from a

broader program of I. A. studies with more depth. I would judge that most large high schools have an I. A. program comparable to most teacher training schools in our state.

15. As far as I. A. - NO (only 1 hour each day student teaching). The core class (block of time) student teaching experience yes.

16. Yes, I would say it is adequate but that you learn as much when you are actually working in the field.

17. Yes, adequate in the mild sense of the word. My weakest spot as far as preparation was concerned was in inventory, resale accounting, and knowing how many of what supplies to order.

18. Yes.

19. No.

20. No, not to a certain extent. Student teacher should be able to take over more. Teaching units etc., shouldn't be required to an extent it takes all his time in preparing daily lessons plans.

21. To answer this question I need about two more years teaching. My first year of teaching was fair in my mind, but I think my second will be much better. Until I have proven this my answer would have no meaning.

22. Yes, I do. Page IV most of this will have to come with experience in this field. Everything can't be gained in one quarter of student teaching.

23. I felt prepared as a teacher, but not prepared as far as Industrial Arts mechanics such as the ordering of materials and such.

24. Low in methods of presentation and delivery. Low in administrative experiences as they relate to Ind. Arts.

25. I believe the answers to the above questions are self explanatory. There was adequate opportunity to handle the class, but nothing else.

26. This area was probably not covered as it should have

been. No maintenance was taught - ordering - accounting - inventory. This doesn't happen during winter quarter - (spring would be best.) I believe I was prepared - However, as anyone knows the first year is the hardest and you learn more that year than any other, because of new situations. However, it would be impossible for a school to cover all areas, because no two have the same regulations and they operate differently.

27. I wouldn't say my practice teaching in grade school helped a bit. I believe I. A. majors should practice teach I. A. in jr. or sr. high and should do some classroom teaching work either in I. A. or their minor area.

28. Yes. I had several years experience in a cabinet shop. This experience helped make up for the experiences you will never get in college.

29. I believe this is one area where more time should be spent. Maintenance repair courses are important. Records is another important area.

30. No! In as much as assignment was to a self-contained classroom after teaching in a period teaching situation and assignment included <u>much</u> supervisory responsibility after having <u>none</u> in student teaching assignment.

31. Yes and no. I feel as though the college did not follow through with my previous training in acquiring a job as an industrial arts teacher.

32. Partially. A second quarter of student teaching would increase confidence in the first year teacher.

33. I felt I was prepared until mid-year when the above items checked "no" began to appear and no set policy could be established with the school administration.

34. My first teaching job wasn't in Ind. Arts, but I managed. When I started teaching I. A. I lacked administrative experience.

35. Not by my practice teaching. I feel that my student teaching was a complete waste of my time. I know it can be valuable help if done properly under supervision of an interested and competent instructor.

36. College instruction weak in several areas. Maintenance, purchasing, grading, etc.

37. Yes.

38. Generally, yes; specifically no. Many things gotten at college sound find, but just try to apply them on the average school and you get nowhere. Class load, who takes the course and who doesn't, budget, rotating program of tool and machine replacement, textbooks (we just got a "set" after 7 years,) preregister of students to aid ordering supplies aiding in the planning of new shops (administrators reluctent), etc. I feel much of this could be gotten before student teaching and then used in student teaching rather than getting it in student teaching and using it for the first time when employed.

39. No. Most of us go out with ideal ideas and we will never see them. Loads are high, administrative duties are many, philosophy is ideal but wrong, you will learn more in two months then you have learned all your time in college.

40. The "no" answers to question IV would indicate that in this area I felt that I was not adequately prepared.

41. Many of the above are learned very quickly when they come up in the teaching situation. They would take too much time in college.

42. Yes - with reservations as checked above.

43. No. I can't see how anyone can be, but if you know the subject and are willing to learn it doesn't take long.

44. Yes. A program does not have to include everything to be adequate. Any individual capable enough to teach should be resourceful enough to get what ever he needs.

45. Yes.

46. No. I felt very insecure and floundering. I had discussed things well enough but I believe I should have some written material, maybe a check off list, of things I should check before school start and the

organization of the 1st month.

47. I feel as for teaching I was very well prepared. As far as the preparation for keeping records and ordering tools and supplies I was hardly trained at all. Whether such training could be given in college I don't know as every school district seems to have different ways and standards of record keeping and supply ordering.

48. No. As can be seen by the negative marks. An adequately prepared person should be able to mark most of the above yes. My first experience as a full time I. A. teacher put me in with a more experienced one. This was most valuable.

49. My first student teaching experience was in Mechanical Drawing - a class of 15 eighth graders for a whole quarter - in one of the Minnesota State Colleges - had all my practice teaching there. Should have had more practice teaching in shopwork.

50. Yes I feel they do a good job at Ellensburg. I feel I was well-trained when I entered the teaching field. I feel one of the greatest needs is to develop the proper attitude in the college student, alot of weakness can be overcome with a good attitude.

51. The only way I see it possible to be adequately prepared in the Industrial Arts field is to have had the full responsibility for at least two years. Ordering, planning, resale accounting, power equipment should be a college class.

APPENDIX B

The questionnaire sent to graduates in industrial arts from Central Washington College of Education. Tabulated results of the questionnaire are found in Chapter II on Tables I through V.

AN EVALUATION OF THE STUDENT TEACHING PROGRAM

AT CENTRAL WASHINGTON COLLEGE

A sound program of student teaching in industrial arts must offer experiences in the year-around program faced by the teacher. The purpose of this study is to evaluate the student teaching program through the experiences of teachers of industrial arts. I would appreciate your cooperation through the evaluation of this questionnaire.

On what grade level did you practice teach? _____

When did you do your practice teaching? _____

How long have you taught in industrial arts? _____

How many I.A. classes do you have each day? _____

I. Evaluate your undergraduate training as adequate or inadequate prior to student teaching.

		adequate	inadequate
General	English	☐	☐
	History	☐	☐
	Mathematics	☐	☐
	Science	☐	☐
Education	Psychology	☐	☐
	Teaching Methods	☐	☐
Industrial Arts	Technical Information	☐	☐
	Skills	☐	☐
	Teaching Methods	☐	☐
	Philosophy	☐	☐

COMMENTS _____

II. Evaluate the supervision you received:

From the College.	YES	NO
1. Were you assigned in the field of your preparation?	☐	☐
2. Was your advisor a qualified industrial arts person?	☐	☐
3. Were you instructed on approaching the classroom as a student teacher?	☐	☐
4. Did your advisor observe the various situations that you were exposed to?	☐	☐
5. Did your advisor's visits include adequate evaluations?	☐	☐
6. Were you given definite teaching problems to work on?	☐	☐
From the Classroom Teacher.		
1. Were you made aware of the complete semester or term program?	☐	☐
2. Did you have daily teaching problems?	☐	☐
3. Were you assigned complete teaching units?	☐	☐
4. Were you assigned regular administrative duties?	☐	☐
5. Were your assignments supervised?	☐	☐
6. Did your supervisor adequately evaluate your daily activities?	☐	☐

COMMENTS_____

_____

_____

III. Rate the following experiences as -	adequate	or inadequate
1. Teaching in a laboratory environment.	☐	☐
2. Teaching in a classroom environment.	☐	☐
3. Working with individual students.	☐	☐
4. Organizing and operating a student personnel plan.	☐	☐
5. Counciling in a homeroom situation.	☐	☐
6. Counciling individual students.	☐	☐
7. Development of laboratory and classroom teaching aids.	☐	☐
8. Evaluation of student projects.	☐	☐
9. Evaluation of classroom work.	☐	☐
10. Evaluation of student performance.	☐	☐
11. Did your student teaching situation allow you to meet the requirements of the assignments given you by the college?	☐	☐

COMMENTS_____

IV. Did your student teaching experience provide you with industrial arts administrative experience in the following areas?

		YES	NO
MAINTENANCE	Hand tools	☐	☐
	Power equipment	☐	☐
	Room facilities	☐	☐
RECORDS	Ordering resale supplies	☐	☐
	Resale accounting	☐	☐
	Inventory	☐	☐
	Planning for and ordering new equipment	☐	☐
	Report cards	☐	☐
	Permanent records	☐	☐
Parent-teacher relationships		☐	☐

Do you feel that you were adequately prepared to begin your first teaching job? Comments!

_____

_____

_____

_____

Thank you for cooperating in this study.

Gerald D. Bailey

Gerald D. Bailey

APPENDIX C

Several colleges and universities were contacted concerning their industrial arts student teaching program. The letter used and the names of the schools to which it was sent are presented in Appendix C.

SAMPLE LETTER

Dear Sir:

I am investigating a possible thesis topic as a candidate for a masters degree in education. The topic in question concerns an effective industrial arts student teaching program.

The policies of your department which direct student teaching would facilitate this study. I would appreciate copies of the following, if available:

1. Your guide to industrial arts student teachers.
2. Your specific assignment to Industrial Arts student teachers.
3. Your guide to industrial arts classroom supervisors.
4. Your guide to industrial arts college supervisors.

Thank you for your cooperation in this matter.

Sincerely yours,

Gerald D. Bailey

SCHOOLS TO WHICH THE LETTER WAS SENT

1. Wayne University, Detroit, Michigan.
2. University of Minnesota, Minneapolis, Minnesota.
3. Stout State College, Monemonie, Wisconsin.
4. Fresno State Teachers College, Fresno, California.
5. State University of New York, Teachers College, Oswego, New York.
6. Northern Illinois University, DeKalb, Illinois.
7. University of Missouri, Columbia, Missouri.
8. College of Education, University of Oregon, Eugene, Oregon.
9. Eastern Oregon College, LaGrande, Oregon.
10. Oregon College of Education, Monmouth, Oregon.
11. Oregon State College, Corvallis, Oregon.
12. Eastern Washington College of Education, Cheney, Washington.
13. School of Education, State College of Washington, Pullman, Washington.
14. College of Education, University of Washington, Seattle, Washington.